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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,945	10/30/2003	Shintaro Yamada	500.43230X00	6254

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ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER

BRASE, SANDRA L

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/695,945

**Applicant(s)**

YAMADA ET AL.

**Examiner**

Sandra L. Brase

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006 and 22 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 6-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Species I in the reply filed on 7/20/05 is acknowledged. The traversal is on the ground(s) that claims 1 and 6 are generic. This is not found persuasive because the claim language of claim 1 specifies a shape and configuration of a development means, where this corresponds to Species I, and the claim language of claim 6 specifies a shape and configuration of a toner regulating blade, where this corresponds to Species II. Therefore, there are no generic claims in the current application. Applicant is to note that there is no rule or law requiring a species restriction to designate all of the existing figures in an application to correspond with one claimed species or another.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 2 and 6-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/20/05. Applicant states on page 11, lines 17-19, of the reply filed on 12/22/05, that newly added claims 14-22 "have been presented which recite the features of Species II", thus since Applicant identifies these new claims as drawn to non-elected Species II, they are withdrawn from further consideration.

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3. Applicant is to note, that in the Office Action mailed 9/22/05, the Examiner inadvertently made an obvious error as to paragraph 2, where the election was indicated as without traverse, where as properly indicated in paragraph 1 of the Office Action mailed 9/22/05, the election was indicated with traverse. The above paragraph 2 now correctly states that the election was made with traverse.

4. This application contains claims 2 and 6-22 drawn to an invention nonelected with traverse in the reply filed on 7/20/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numazu et al. (US 5,765,082) in view of Sato (US 2001/0055499).

8. Numazu et al. (...082) an electrophotographic apparatus comprising a plurality of image forming devices, each of the plurality of image forming devices comprise a photosensitive drum (41a, 41b, 41c and 42) provided on a surface thereof with a photosensitive layer (col. 10, lines 3-6), charging device (102) for having the photosensitive layer charged at a predetermined electric potential, exposure device (109) for subjecting the photosensitive layer to exposure on the basis of image data to form an electrostatic latent image, and developing device (103) for adhering toner to the electrostatic latent image on the photosensitive drum to form a toner image, and wherein each of the photosensitive drum of each of the plurality of image forming devices is in contact with a straight portion of a medium conveyance belt (43), where images formed on a photosensitive drum of each of the plurality of image forming devices are transferred to be overlapped upon each other so as to form a color image directly on a medium conveyed by the medium conveyance belt (col. 10, lines 10-54; and col. 16, lines 3-42). The developing device of each of the plurality of image forming means comprises a tip end part and a toner storage part coupled to the tip end part to store toner (figures 3 and 4). The tip end part comprises a developing roller (104) in contact with the photosensitive drum to rotate to form a thin toner layer on a surface of the photosensitive drum (col. 15, line 66 – col. 16, line 2), a supplying roller (107) for supplying toner to the developing roller, and a toner regulatory blade (108) brought into

linear contact with an outer peripheral surface of the developing roller at a predetermined pressure to form a thin toner layer on the surface of the photosensitive drum (col. 14, lines 54-59). The thickness of the tip end part of the developing means in a direction of movement of the medium conveyance belt is smaller than a thickness of the toner storage part in the direction of movement of the medium conveyance belt (figures 3 and 4). The exposure device (109) is arranged in a location, in which the tip end part of the developing device is small in thickness (figures 3 and 4; and col. 15, lines 1-7). In a space formed by the tip end part of the developing device and the toner storage part of the developing device of a first image forming device of the plurality of image forming devices, the exposure device and the charging device of a second image forming device which is arranged adjacent to the first image forming device for a different color are arranged (figures 3 and 4). However, Numazu et al. (...082) do not disclose the claimed configuration of the image forming devices and the exposure device comprising an LED. Sato (...499) discloses an electrophotographic apparatus including a plurality of image forming devices that are arranged vertically along a straight portion of an endless intermediate transfer belt in such a manner that each photosensitive drum is in contact with an outer peripheral surface of the straight portion (figures 1 and 2). An exposure device (72M, 72C, 72Y and 72Bk) is contained in each of the plurality of image forming devices, where each exposure device comprises an LED array ([0041], [0044]-[0046]).

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Numazu et al. (US 5,765,082) in view of Sato (US 2001/0055499) as applied to claim 1 above, and further in view of Nishimura et al. (US 5,475,478).

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10. Numazu et al. (...082) in view of Sato (...499) disclose the features mentioned previously, but do not disclose that only the toner storage part of the developing means is detachably mounted in the body of the electrophotographic apparatus. Nishimura et al. (...478) disclose a developing means where a tip end part of the developing means is fixed to a body of an image forming apparatus and only a toner storage part of the developing means is detachably mounted in the body of the electrophotographic apparatus (col. 4, lines 10-14; and figure 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have only the toner storage part of the developing means detachably mounted in the body of the electrophotographic apparatus, as disclosed by Nishimura et al. (...478), so that only the toner storage part of the developing means needs to be replaced when toner needs to be replenished.

#### ***Allowable Subject Matter***

11. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1, 4 and 5 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant is to note that in the previous office action an inadvertent typographical error was made, where Applicant is to note that, as indicated correctly above, that claims 2 and 6-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a

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nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/20/05.

***Final Rejection***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Inquiry***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is 571-272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase  
Primary Examiner  
Art Unit 2852

March 20, 2006